

Application No.: 08/598,457

Docket No.: 00-VE13.25 CPA1

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A spatial sound conference system comprising:

a conference station comprising:

right and left spatially disposed microphones positioned on a dummy head and connected to a communications channel for receiving right and left audio signals, wherein the differences between the right and left audio signals represent a head-related transfer function,

a loudspeaker positioned proximal to the dummy head and connected through the communications channel to the microphone, and

a position simulator attached to the dummy; and

a remote station comprising:

right and left spatially disposed loudspeakers connected to the communications channel,

a microphone positioned in the remote station and connected to the communications channel for receiving an audio signal, and

a head-tracking sensor in the remote station connected through the communications channel to the position simulator.

2. (previously presented) A spatial sound conference system according to claim 8, further comprising:

a compression unit connected to the right and left spatially disposed microphones for compressing the right and left audio signals; and

a decompression unit connected to the right and left spatially disposed loudspeakers for decompressing the compressed right and left audio signals.

3. (previously presented) A spatial sound conference system according to claim 8, further comprising:

a microphone positioned in the remote station and connected to the communications channel for receiving an audio signal; and

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a loudspeaker positioned in the conference station and connected through the communications channel to the microphone.

4. (original) A spatial sound conference system according to claim 3, further comprising:

a compression unit connected to the microphone positioned in the remote station for compressing the audio signal; and

a decompression unit connected to the loudspeaker positioned in the conference station for decompressing the compressed audio signal.

Claims 5 – 6: cancelled.

7. (currently amended) A spatial sound conference system according to claim 1, further comprising:

~~a microphone positioned in the remote station and connected to the communications channel for receiving an audio signal; and~~

right and left spatially disposed loudspeakers positioned in the conference station and connected through the communications channel to the microphone positioned in the remote station, and

~~wherein the right and left spatially disposed microphones are positioned on a dummy head.~~

8. (currently amended) A spatial sound conference system comprising:

a conference station including:

right and left spatially disposed microphones positioned on a dummy head and connected to a communications channel for receiving right and left audio signals, wherein the differences between the right and left audio signals represent a head-related transfer function, and

a position simulator attached to the dummy head; and

a remote station including:

right and left spatially disposed loudspeakers connected to the communications channel, and

a head-tracking sensor in the remote station connected to the communications channel,

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said position simulator attached to the dummy head and connected through the communications channel to the head tracking sensor.

9. (previously presented) A spatial sound conference system according to claim 8, further comprising:
a video camera positioned in the conference station and connected to the communications channel for receiving a video image; and
a display positioned in the remote station and connected through the communications channel to the video camera.
10. (original) A spatial sound conference system according to claim 9, wherein the video camera is positioned near the location of eyes on a dummy head.
11. (original) A spatial sound conference system according to claim 9, wherein the display is a head-mounted display.
12. (previously presented) A spatial sound conference system according to claim 8, wherein the right and left spatially disposed loudspeakers are a headset.
13. (previously presented) A method for conducting a spatial sound conference comprising the steps of:
detecting movements of a conference participant at a remote station to provide movement information;
transmitting said movement information to a conference station;
controlling a dummy head at said conference station in response to said movement information;
converting audio information into right and left audio signals at said conference station, wherein the conversion imparts a differential characteristic to the right and left audio signals, and the differential characteristic is represented by a head-related transfer function, and the right and left audio signals comprise spatialized audio;
transmitting audio information representative of said spatialized audio from the conference station across a communications channel to a remote station; and

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playing the spatialized audio in the remote station.

14. (original) A method for conducting a spatial sound conference according to claim 13, further comprising the steps of:

compressing the right and left audio signals after the step of converting; and decompressing the compressed right and left audio signals after the step of transmitting.

15. (currently amended) A spatial sound conference system according to claim 1, comprising:

said conference a-transmitting station further comprising:

~~a-microphone connected to a communications system for receiving an audio signal;~~
~~a-head related transfer function unit connected to the communications system for imparting a head related transfer function to the audio signal to produce a spatialized audio signal, and~~

a compression unit for compressing the right and left audio signal signals; and

said remote a-receiving station further comprising:

a decompression unit for decompressing the compressed right and left audio signals signal, and

~~right and left spatially disposed loudspeakers connected to the communication system for receiving the spatialized audio signal.~~

16. (currently amended) A spatial sound conference system according to claim 15, wherein:

said compression unit is connected to the microphone right and left spatially disposed microphones for compressing the right and left audio signal signals; and

said decompression unit is connected to the head-related transfer function unit for decompressing the compressed right and left audio signal signals.

Claims 17 – 27: cancelled